POLIS25
ANNUAL CONFERENCE

26-27 November 2025
Royal Jaarbeurs | Utrecht, Netherlands

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City of Utrecht

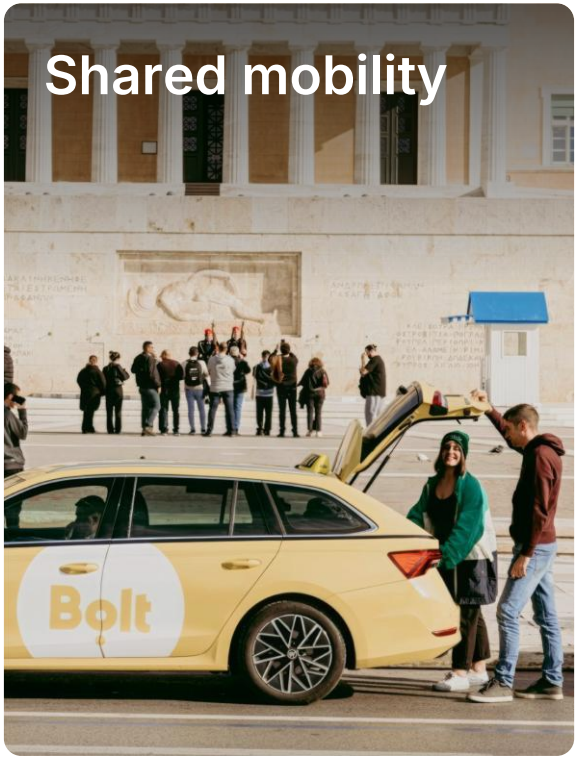
Bolt x ETH Zurich: Sustainable Urban Transitions Lab

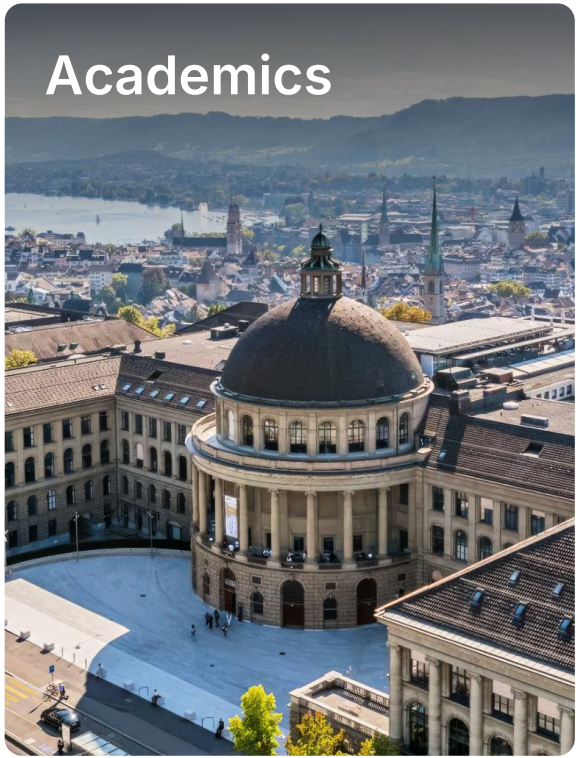
6 Month Update

Haya Doudri
November 2025

Bolt

The Lab combines:





Why was the Lab created?

1. Bridge science - policy gap in urban planning
2. Combine City data with shared mobility usage patterns
3. Help cities evaluate true benefits of big infrastructure investment

Urban mobility is evolving faster than ever. Cities have seen major shifts in transport behaviour in the past few years. The COVID pandemic led to a boom in hybrid work, high cost of living has moved people to city outskirts, and as car ownership declines new modes of shared and sustainable mobility are coming in to take its place.

These trends are reshaping how people move in cities and, crucially, they're placing pressure on transport authorities and city officials to accommodate their new behaviours.

"Transport and infrastructure projects are some of the biggest financial commitments a city will ever make," Bolt's Director of Public Policy Haya Verwoord Douidri tells Zag Daily. "These investments are worth hundreds of millions of dollars so every decision must be data-based and future-proofed.

"This is the mission of our research lab with ETH Zürich – to provide a complete data-driven picture of how people move across cities, and unlock new solutions that help cities make the best financial decisions when implementing shared and sustainable transport."

It's a mission that Bolt has invested heavily in, with the two-year pilot project forming part of Bolt's Urban Fund which launched last year to accelerate the societal benefits of shared mobility worldwide. Recognising the critical and enabling role of transport to connect people to their daily necessities, this fund steers Bolt closer to its ultimate mission of truly creating cities for people and not cars.

Help create a fully integrated transport network that makes cities for people

What goes into the Lab?

Bolt

- Journey data
- GPS tracks
- Telemetry
- New sensors
- Sociodemographic
- Citizen surveys

Cities

- SUMPs and targets
- Household travel surveys
- Parking data
- Low emission zone data
- Site visits

ETH Zurich

- Infrastructure and mobility expertise
- Spatiotemporal analysis
- Simulation modelling

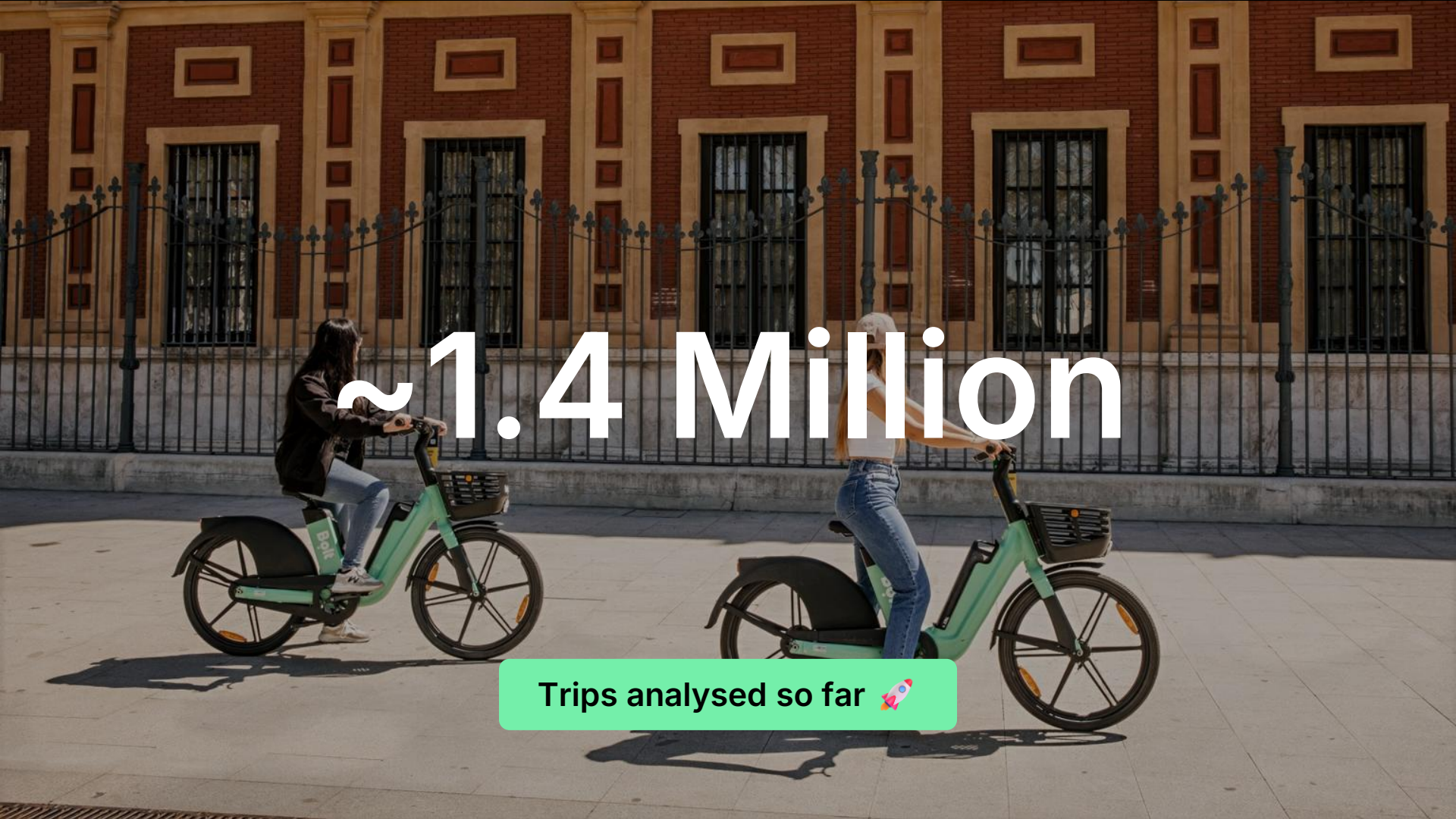
Our Pilots

Hannover (1 Year)

Seville (2 Years)

	Hannover	Seville
Context	● Significant progress from car city to cycling city	● Extensive active travel investment but still just one metro line and persistently high car usage
Goals	• VEP2035+ targets 70% CO_2 reduction and 2x cycling/PT trips by reallocating road space, expanding cycling/PT infrastructure, and creating mobility hubs	• PMUS and PITMA target expanding high-capacity transit and cycling networks, and improving multimodal integration
Lab	● Help identify, prioritise and model hub locations for an integrated network ● Enhance cycling network safety	● Model the benefits of mass transit expansions and multimodal connections ● Enhance cycle network safety

Six months in


~1.4 Million
Trips analysed so far 🚀

What have we seen?

- New Trip Insights: Women connect more with public transport and visitors ride very differently from locals
- A big impact from Policy: Hannover’s City centre parking restrictions led to usage changes
- Clear safety hotspots, which often vary spatially across different user groups
- Obvious gaps in public transport access.

Roman, O., He, X., Zani, D., Kagho, G. O., Schimohr, K., Heinen, E., & Adey, B. T. (2025). SUT Lab: Seville Technical Interim Report. Understanding shared mobility use and improving the integration with the transport system. ETH Zurich.

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What’s next?

What’s coming up?

1. Use ride-hailing data to model traffic patterns and bottlenecks
2. Refine micromobility analysis with new sensors, video and customer surveys
3. Expand MATSim model in both cities
4. Use MATSim models to evaluate benefits (emissions, accessibility) of PT and mobility hub expansion
5. Publish full recommendations in Spring 2026

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Watch this space...


Bolt